AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-10 (Cancelled)

Claim 11. (New) An antitumor composition comprising at least one complex of the general formula

$$D_2 - M - T$$

where

D is a β -diketone,

M is a metal atom selected from the group consisting of Cr, Cu, Mn, Fe, Ni, Co, Zn and Mo,

T is a substance having at least one N-, O- or S-containing group, and where M participates in an electron donor-acceptor interaction with T, and M in the complex has a free coordination site.

- Claim 12. (New) The antitumor composition as claimed in claim 11, wherein D is selected from acetylacetone and dibenzoylmethane.
- Claim 13. (New) The antitumor composition as claimed in claim 11, wherein T is a substance having at least one NH₂, NH, N, O or S group.
- Claim 14. (New) The antitumor composition as claimed in claim 11, wherein T is a substance selected from the group consisting of 2,4-dihydroxy-5-fluoropyrimidine, 5-fluoro-1-(tetrahydro-2-furyl) uracil, 2-[bis(2-chloroethyl)-amino]-tetrahydro-2H-1,3,2-oxazephosphorine 2-oxide, 1,2-imido-propanoic amide, 2-hydroxymethyl-5-hydroxy-γ-pyrone, 2,4,6-trimethylpyridine, 2,4,6-tri-2-

pyridyl-1,3,5-triazine, 4-[bis (2-chloroethyl)amino] –L-phenylalanine, 2-(3-pyridyl) piperidine, 2-2'-bipyridine, 2-methyl-(5-trimethylbutyl-1-il-ol-3) pyridine, 2-methyl-(3-dimethyl-amino-1-propynyl)pyridine and 2-methyl-5-ethylenepyridine.

Claim 15. (New) An antitumor composition of the general formula.

$$D_2 - M - T$$

in which D is acetylacetone, M is Cu and T is a substance selected from the group consisting of

2,4-dihydroxy-5-fluoropyrimidine, 5-fluoro-1-(tetrahydro-2-furyl) uracil, 2-[bis(2-chloroethyl)-amino]-tetrahydro-2H-1,3,2-oxazephosphorine 2-oxide, 1,2-imido-propanoic amide, 2-hydroxymethyl-5-hydroxy-γ-pyrone, 2,4,6-trimethylpyridine, 2,4,6-tri-2-pyridyl-1,3,5-triazine, 4-[bis (2-chloroethyl)amino] –L-phenylalanine, 2-(3-pyridyl) piperidine, 2-2'-bipyridine, 2-methyl-(5-trimethylbutyl-1-il-ol-3) pyridine, 2-methyl-(3-dimethyl-amino-1-propynyl)pyridine and 2-methyl-5-ethylenepyridine.

Claim16. (New) An antitumor composition of the general formula

$$D_2 - M - T$$

in which D is acetylacetone, M is Mn and T is a substance selected from the group consisting of

2,4,6-trimethylpyridine,

2,4,6-tri-2-pyridyl-1,3,5-triazine, 2-2'-bipyridine, 2-(3-pyridyl) piperidine, 1,2-imidopropanoic amide and 4-[bis (2-chloroethyl)amino] –L-phenylalanine